



LITHO ART SUBMISSION

The following guidelines are meant to help smooth the process of your art submissions for your pre-printed card project. If you cannot meet any of the guidelines, do not panic, just give us a call or send what you have and we will work around most issues. We use a program called QuarkXPress to layout your card or if you wish to fully layout your card before you send it to us.

The following submissions guidelines are more hints and suggestions that would be helpful to quickly create your pre-printed card proof and final card.

- **LAYOUT** -- Send us an example of how you want the final layout to look like (location of art, logos, text). Try to show us what we will be printing and what you will be printing (if you are using software that has layer capability, you can have a layer dedicated to FPO (For Position Only) art - like the magnetic stripe or the card holders photo that you will be printing with your desk top printer). The art that will be varying from card to card (example bar code or variable number) that ColorID will be printing for you should be shown separately as well (possible on a separate layer of your art).
- **ELEMENTS** -- Send all the elements of the card that we will be printing separately so we can layout the card with each element (for example – file for each logo, file for each photograph).
- **TEXT** – If possible please send all text in a vector type file (such as eps format).
- **LOGOS** -- If possible please send all logos in a vector type file format (such as eps format). Try to avoid sending logos and text in bit mapped formats (like JPG, JPEG, GIFF, BMP).
- **PHOTOS** -- Send photos in a bit mapped program that is a least 300 dpi or higher at the correct image size for your card. It is no problem sending photos at 600 dpi if you have them at this high format.

- **FONTS** - Send any special fonts with your art. We prefer PostScript type for both MacOS and Windows 95/98/NT platforms. If you must use TrueType, please notify your customer service person so that this can be noted on the job specifications. For MacOS, please supply both screen font suitcases and the printer font(s) files. Please ensure that you have supplied all printer fonts required by your job. TrueType fonts may not output as expected on high-resolution devices as compared to a low-resolution printer you might use for proofing. TrueType is optimized for 600DPI printers or lower and so the quality of the rendered type will change in some cases significantly, when output at our normal film- and plate-resolution of 2400DPI.

- **PHOTOSHOP** -- If you use Adobe Photoshop to layout your card, do not flatten your file before you send it to us (leave the layers). You may supply original, layered Photoshop files to supplement the "final" TIFF and/or EPS images you send. Photoshop files with all layers intact allow us to make alterations to your artwork that might be required to accommodate a printing-process issue you might not be aware of.

- **COMPUTER SCREEN** -- Make sure you check your colors on your computer screen in CMYK and not RGB mode (the card printing presses will print in CMYK – not RGB – so you will want to look at is the way the press will print it).

- **PREFEREED SOFTWARE** – The following is the preferred software that we would like you to use for your art creation (but many other programs will work fine).
 - QuarkXPress
 - Adobe Illustrator
 - Adobe Photoshop
 - Adobe Acrobat – PDF

- **FONTS** -- We prefer PostScript type for both MacOS and Windows 95/98/NT platforms. If you must use TrueType, please notify your customer service person so that this can be noted on the job specifications. For MacOS, please supply both screen font suitcases and the printer font(s) files. Please ensure that you have supplied all printer fonts required by your job. TrueType fonts may not output as expected on high-resolution devices as compared to a low-resolution printer you might use for proofing. TrueType is optimized for 600DPI printers or lower and so the quality of the rendered type will change in some cases significantly, when output at our normal film- and plate-resolution of 2400DPI.

- **IMAGE SPECIFICATIONS** -- All grayscale and color images should be provided at a minimum resolution of 300DPI or our preferred resolution of 350DPI. Black & white (line-art) images should be provided at a minimum resolution of 1200DPI. Copy-dot scans must be provided at exactly 2400DPI. These resolutions assume that you are providing the image at

the final, "full" size. Reduced, enlarged, over- or under-resolution images may not produce the desired results and may cause complications during production.

- **JPEG FILES** -- JPEG compression will create artifacts in an image, which affect both the overall image quality and color. You should use the highest possible quality level (i.e. least compression) at the "appropriate" resolution. "Appropriate" resolution is that resolution required yielding an effective resolution of 300-350dpi at the final reproduction size of the image. Examples: An image printed at 100% should have a resolution of 300 to 350dpi. An image printed at 50% of original size should have a resolution of 150 to 175dpi (effective resolution of 300 to 350dpi). JPEG compression to any degree and at any resolution will introduce artifacts into an image that may or may not be noticeable/objectionable. If you provide JPEG compressed images, we will re-save them as normal EPS images for our production processes but any compression artifacts introduced by the initial compression will remain in the image. Please examine your proofs closely.
- **WEB SITE ART** - Files taken from web sites or prepared for use on the World-Wide-Web will most likely be low-resolution RGB images (72 DPI or thereabouts) with some form of lossy-compression and/or restricted color palette. Use or re-purposing of these types of images will most likely result in disappointing printed-results. Use of these types of images should be avoided unless no other options are available. Up sampling (increasing the resolution through interpolation of existing image data) will not normally improve the reproduction quality of low-resolution images.
- **COLORSYNC** -- Where applicable, do not embed ColorSync profile information. ColorSync profiles are only meaningful in a closed-loop color management environment that must be established long before the exchange of image data. Do not include halftone transfer functions in images, as these will be ignored on output.
- **TIFF FORMAT** Try to avoid the use of internal LZW compression. Delete any alpha channels unless these are intended for use as clipping paths in QuarkXPress. LZW compression by itself will not compromise the quality of an image since it is not "lossy." It trades file-size for time. LZW compression, at minimum will increase the time required to open/save an image since each open/save incurs a decompression/compression operation. LZW compression can cause problems at RIP-time.
- **EPS FORMAT** – Do not use internal compression and delete any unused alpha or paths. Clipping path "flatness" set at 3 or higher. Flatness less than one can result in at rip-time.

- **TEXT AND GRAPHICS --** Unless specifically called for by your design, we recommended that all text should be typeset in an object-oriented application like QuarkXPress, PageMaker, Illustrator, Freehand, et al. You will have greater control over the quality of the typesetting within such an application. More importantly, the quality of the type on the final output will be significantly higher than with text typeset within an image-editing application like Photoshop or PaintShop Pro (bit mapped program). If you choose to do your typesetting within Photoshop (or any image-editing application), be aware that high-quality type rendering requires high image resolution (1000DPI or higher for “typeset” quality), which increases file size and processing time dramatically. For example, a CR-80 card with a full-bleed, 4 color process, 350DPI image is about 4MB in size. Type created in an object-oriented application will not add to the file size significantly but will still result in sharp, well-defined text. If, instead, you use an image-editing application to typeset your text, at the minimum resolution of 1000DPI the same image is almost 33MB in size.

- **PLASTIC CARD SPECIFICATIONS –** The following sizes can be used for your layouts.

Card	Final (Trim) Size (in.)	Live Area (in.)	Bleed Area (in.)
CR80	3.375 x 2.125	3.250 x 2.000	3.625 x 2.375

1. **CORNERS --** You do not need to show rounded corners in your artwork.
 2. **LIVE AREA --** Images that fall outside the live area but within the trim size run the risk of being cropped when the card is punched. The “Live” area is also referred to as the “Safe” area since any image that is in the “safe” area is safe from cropping when the card is trimmed.
 3. **BLEED AREA --** Bleed area is the final size plus an additional 0.125” all around the borders of the card. Your bleed elements should extend at least 0.125” beyond the border of the card.
- **MAGNETIC STRIP CONSIDERATIONS --** If your card has a magnetic stripe, you must make allowances for its location on the back of the card. The position of the magnetic stripe will vary slightly from card to card. Artwork that should not normally touch the magnetic stripe should be kept back from magnetic stripe edges by at least 0.0625” to allow for this variation in position. If your design includes an overall color (a.k.a. a “flood”), or overall image, it can “under-lap” the magnetic strip without compromising the integrity of the strip.

Track 2 (ISO 7811-2)

Track 3 (ISO 7811-2)

Minimum Width: 0.25	Minimum Width: 0.405
Top of Card to Top of Stripe: 0.218" Max.	Top of Card to Top of Stripe: 0.218" Max.
Top of Card to Bottom of Stripe: 0.468" Min.	Top of Card to Bottom of Stripe: 0.623" Min.

Within the maximum and minimum values given above, the magnetic stripe can change in width and vertical position and still adhere to the ISO specifications. This takes into account the variation that normally occurs during the production process.

- **SIGNATURE PANEL/FOIL STAMP CONSIDERATIONS** -- If your card has a signature panel and/or foil stamp, there are tolerances in position that you must be aware of. Given these tolerances, you should position your artwork accordingly.

Signature Panel
+/- 0.010" Vertical
+/- 0.015" Horizontal

Foil Stamp
+/- 0.010" Vertical
+/- 0.015" Horizontal

- **GRAPHICAL FLOAT / JITTER -- MOVEMENT OF ART ON CARD**
All lithographic printed images will move around on the surface they are printed on from print to print. This movement is called jitter and is caused by non-perfect printing presses. Unfortunately there is not such thing as a perfect press so there will always be jitter in the printing process. The question is not if there will be jitter, but how much jitter will there be?

The following are the ColorID lithographic pre-printing specifications for printing on plastic cards:

Tolerances are ± 0.030 inches or 0.76 mm (this means the art can move .030 inches or .76 mm in one direction or another on the card). To translate this into maximum movement on the card you need to double the +/- numbers, resulting in the maximum vertical or horizontal movement as follows:

Metric: Maximum Movement is 1.52 mm

Imperial: 60 mil = 60/1000 inch = 1.92/32 inch

To help with this jitter issue the following steps should be considered when designing your artwork on your pre-printed card.

When designing art for a new card, always keep “key” art at least 1/32 to 1/16 of an inch from the edges of the card (preferably 1/16 of an inch).